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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/276,021	03/25/1999	KHALID YOUSSEFF	024/1	1550

7590

06/28/2005

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EXAMINER

HAROLD, JEFFEREY F

ART UNIT

PAPER NUMBER

2646

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/276,021	<b>Applicant(s)</b> YOUSSEFF, KHALID	
	<b>Examiner</b> Jefferey F. Harold	<b>Art Unit</b> 2646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1, 2, 5, 6, 8, and 9** are rejected under 35 U.S.C. 102(b) as being anticipated by Yatrou et al. (United States Patent 5,343,522), hereinafter referenced as Yatrou.

Regarding **claim 1**, Yatrou discloses adaptive sparse echo canceller for active tap selection. In addition, Yatrou discloses an apparatus for canceling echoes over a communications channel, said apparatus comprising: means for implementing, at the start of a communications session over a communications line, a plurality of echo cancellers to cancel echo on said communications line, said echo cancellers each operating to cancel echoes that arrive during a predetermined bandwidth of time, said predetermined band-widths of time being non-overlapping; means for training each of said plurality of echo cancellers to produce a cancellation signal that cancels echoes arriving during the predetermined bandwidth of time associated with said echo canceller; and means for eliminating, after a predetermined training period, all echo cancellers that produce a cancellation signal below a predetermined threshold, as disclosed at column 3, line 12 through column 4, line 57 and exhibited in figures 3 and 4.

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Regarding **claim 2**, Yatrou discloses everything claimed as applied above (see claim 1), in addition, Yatrou discloses wherein said bandwidths of time are equal in width to each other, as disclosed at column 3, lines 38-62 and exhibited in figure 4.

Regarding **claims 5, 6, 8 and 9**, Yatrou discloses everything claimed as applied above (see claims 1 and 2). In addition, claims 5, 6, 8 and 9 are interpreted and thus rejected for the reasons set forth above in the rejection claims 1 and 2.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. ***Claims 3, 4, 7 and 10*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yatrou in view of well know prior art (MPEP 2144.03).

Regarding **claim 3**, Yatrou disclose everything claimed, as applied above, (see claim 2), however, Yatrou fails to disclose bandwidths 16 milliseconds apart. However, the examiner takes official notice of the fact that it was well know in the art to provide bandwidths 16 milliseconds apart.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yatrou by specifically providing bandwidths of various lengths including 16 milliseconds, for the purpose of determining the echo path length.

Regarding **claim 4**, Yatrou disclose everything claimed, as applied above, (see claim 1), however, Yatrou fails to disclose a graphical user interface to allow altering of the predetermined threshold. However, the examiner takes official notice of the fact that it was well know in the art to provide a graphical user interface to allow altering of the predetermined threshold.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yatrou by specifically providing a graphical user interface to allow altering of the predetermined threshold, for the purpose of initial setup and programming of the DSP.

Regarding claims 7 and 10, Yatrou disclose everything claimed as applied above (see claim 8), in addition claims 7 and 10 are interpreted and thus rejected for the reasons set forth above in the rejection of claims 3 and 4.

### ***Response to Arguments***

3. The above cited rejection is a repeat of the rejection provided in the office action dated June 21, 2004. Thus this is a non-final rejection and the response to the Applicant's arguments filed November 26, 2004, have been fully considered but they are not persuasive. Specifically, applicant is correct in that Yatrou discloses an echo canceller. However, the echo canceller is divided into x regions which represents several echo cancellers. Each one of the regions are non-contiguous and these several cancellers operate to cancel echo on the communication channel. Further, the regions represent different time periods which reads on the claimed "bandwidth of time". Therefore the above cited rejection more than adequately meets the claimed limitation.

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**Conclusion**

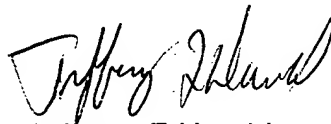
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is 571-272-7519. The examiner can normally be reached on Monday - Friday 9 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JFH

JFH  
June 21, 2005

  
Jefferey F Harold  
Examiner  
Art Unit 2644